UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,420	07/17/2001	Ulrich Heister	520.1002	3981

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EXAMINER
SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/889,420	HEISTER, ULRICH
	Examiner	Art Unit	
	Kevin Schubert	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _17 July 2001_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-7_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-7_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _17 July 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All   b)☐ Some * c)☐ None of:
     1.☐ Certified copies of the priority documents have been received.
     2.☐ Certified copies of the priority documents have been received in Application No. _____.
     3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date 07172001; 06112004.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 8-14 have been considered. The examiner has considered the submitted amendments.

Appropriate correction and incorporation of the amendments should be taken in the applicant's response.

Claim Objections

Claims 8-14 have been objected to because of the following informalities: the claims are

numbered incorrectly. Since claims 1-7 have been cancelled by applicant, new claims 8-14 are

renumbered 1-7 by the examiner. Appropriate correction is required.

Claim 1 is objected to because of the following informalities: part b) contains a grammatical error.

The examiner suggests that the phrase "associated each" be changed to "associated with each".

Appropriate correction is required.

Claim 2 is objected to because of the following informalities: a grammatical error exists. The

examiner suggests that the phrase "each of the device" be changed to "each of the devices". Appropriate

correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being unpatentable by Mionet, U.S. Patent No.

5,920,627.

As per claim 1, the applicant describes an apparatus for synchronizing ATM transmission between a decryptor and an encryptor with the following limitations which are anticipated by Mionet:

a) a first pseudo-random generator associated with the stream encryptor for generating a respective first variable key associated with each of the at least one stream decryptor using a receptive secret key associated with each of the at least one stream decryptor (Col 4, lines 1-14);

b) a respective second pseudo-random generator associated [with] each of the at least one stream decryptor for generating a respective second variable key using the respective secret key, each of the respective second variable key being identical to the associated respective first variable key (Col 4, lines 15-40);

c) a respective device for cell boundary detection associated with each of the at least one stream decryptor (Col 4, lines 58-64);

d) a respective state automaton associated with the stream encryptor and each of the at least one stream decryptor, a respective state of each respective state automaton associated with the at least one stream decryptor being capable of being advanced by the respective device for cell boundary detection, each of the respective states being used for generating the respective variable key (Col 4, lines 51-67).

As per claim 2, the applicant describes the apparatus of claim 1, which is met by Mionet (see above) with the following limitation which is also met by Mionet:

Wherein the respective state of each state automaton is capable of being fed to a respective device for generating a predefined function using the respective state and the respective secret key, each of the devices for generating a predefined function being capable of controlling the respective pseudo-random generator (Col 4, lines 51-67).

As per claims 3 and 7, the applicant describes the apparatus of claims 1 and 4 respectively, which are met by Mionet (see above) with the following limitations which are also met by Mionet:

a) wherein the at least one stream decryptor includes a plurality of stream decryptors, a respective receiver being associated with each of the plurality of stream decryptors, each of the receivers

being connected to the transmission channel, a respective header of each of the ATM cells including

respective information identifying a respective destination receiver of the receivers (Col 4, lines 12-13; Col

6, lines 54-64; Col 9, lines 1-4);

b) wherein the stream encryptor is capable of generating the respective first variable key using

the respective secret key associated with the respective destination receiver of a respective transmitted

ATM cell and the respective state (Col 4, lines 1-14; Col 4, lines 51-57);

c) wherein each of the state automatons are capable of being advanced independently of the

respective destination receiver (Col 5, lines 29-34);

The applicant should note that regarding the "plurality of stream decryptors" in part a), Mionet's

system includes means for receiving "at least on key from at least one decryption device" (Col 4, lines 12-

13). Clearly, Mionet accounts for a plurality of decryptors.

As per claim 4, the applicant describes the following method for synchronizing ATM transmission

between a decryptor and an encryptor in which parts a) and b) are met by Mionet in claim 1 (see above)

with the following additional limitation which is also anticipated by Mionet:

c) advancing on a per-ATM cell basis a respective state of a respective state automaton

associated with the stream encryptor and each of the at least one stream decryptor, each of the first and

second variable keys being a function of the respective state (Col 5, lines 29-34);

The applicant should note that a timing mechanism is included in Mionet's system to facilitate cell

position synchronization.

As per claim 5, the applicant describes the method of claim 4, which is met by Mionet (see

above), with the following limitation which is also met by Mionet:

Wherein the advancing of the respective state associated with each of the at least one stream

decryptor is performed in response to a detecting of a respective ATM cell boundary, the detecting being

performed by comparing a check sequence computed from a respective header of the ATM cell to a

check sequence transmitted in the header (Col 6, lines 54-64; Col 9, lines 1-4).

As per claim 6, the applicant describes the method of claim 4, which is met by Mionet (see above), with the following limitation which is also met by Mionet:

Further comprising generating a respective input variable for each of the pseudo-random generator using the respective secret key, the respective state, and a respective predefined function;

The applicant should note the secret key is mentioned in Col 4, lines 41-46, the respective state is mentioned in Col 4, lines 65-67, and the respective predefined function is a timing mechanism mentioned in Col 5, lines 29-34.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Caldwell
Andrew Caldwell

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